

Remarks

Claims 1-13 are pending in the application. Claims 3-5, 7, and 10-12 were withdrawn and claims 1, 2, 6, 8, 9 and 13 were rejected. Reconsideration of the claims is respectfully requested. No new matter has been added.

Rejection Under 35 U.S.C. § 102

Claims 1 and 8 were rejected under § 102(b) as being anticipated by U.S. Patent No. 6,193,024 issued to Heppes et al. (hereinafter "Heppes '024"). A *prima facie* case has not been established for the reasons discussed below.

Claims 1 and 8 require a tuned mass damper. More specifically, claim 1 requires "a backplate having at least one hole formed therein" and "a tuned mass damper having a mass disposed within the hole for damping vibrations" associated with the operation of a vehicle disk brake. Similarly, claim 8 requires "a backplate having a hole formed therein" and "a tuned mass damper having a mass disposed within the hole in the backplate and attached to the backplate for damping vibrations" associated with the operation of a brake assembly. In the Office Action, the Examiner stated that radial material strip 18 is "a mass [of a tuned mass damper] disposed within the hole for dampening vibrations associated with the operation of the disk brake" (see Office Action, page 2, paragraph 3). The Examiner is mistaken. The radial material strip 18 facilitates the distribution of stress over the damping plate to improve damping plate life and reduce localized stresses (column 1, lines 58-67, column 2, lines 10-12). As such, the radial material strip bears absolutely no relation to vibration dampening and is not a tuned mass damper as required by claims 1 and 8.

The Examiner also speculated that "the strip of Hepes [sic] performs the functions cited by applicant, but in performing these functions it helps dampen vibrations as inherent in the nature of dampers" (see Office Action, page 5, paragraph 7). The Examiner's comments are not supported by Heppes '024. Indeed, the Examiner cannot cite any portion of Heppes '024 that teaches or even remotely suggests that the radial material strip dampens

vibrations associated with the operation of a disk brake or brake assembly. Moreover, Heppes '024 teaches away from any supposed vibration dampening. Specifically, the radial material strip in Heppes '024 is disposed "flush with the top of the non-cut-out area of the pressure transferring surface 2 so that a pressure-applying unit 3 contacts the pressure-transferring surface 2 at least in sections when pressure starts to be applied" (column 5, lines 20-23). In other words, the radial material strip is held under pressure against a pressure transferring surface and is not permitted to vibrate or provide any dampening effect. Indeed, Heppes '024 emphasizes that "it is important that sections [of the radial material strip] distributed across the entire pressure surface of the pressure applying unit lie on the pressure-transferring surface of the damping plate" (column 5, lines 45-48). As such, it is illogical to conclude that the radial material strip acts as a tuned mass damper as the Examiner has done. As a result, a *prima facie* case has not been established and this rejection must be withdrawn.

In addition, the Examiner impermissibly ignored claim language in rejecting claim 8. Claim 8 requires "a backplate attached to the brake pad, said backplate having a hole formed therein" for receiving a mass of a tuned mass damper. Heppes '024 does not disclose a backplate that is attached to a brake pad and has a hole for receiving a mass of a tuned mass damper. In the Office Action, the Examiner stated that damping plate 1 is a backplate (see Office Action, page 3, paragraph 3). The damping plate 1 is "disposed on a base plate 4" (column 3, line 59). A brake lining 5 is disposed on the other side of the base plate 4 (column 3, line 60). Therefore, the damping plate 1 is separated from the brake lining 5 by the base plate 4 and is not attached to the brake pad lining as required by claim 8. Consequently, a *prima facie* case has not been established and Applicants request that this rejection be withdrawn.

For these reasons, Applicants respectfully believe that a *prima facie* case has not been established and request that this rejection be withdrawn. Since claims 2, 6, 9 and 13 depend on claims 1 and 8, Applicants believe these claims are allowable for the same reasons.

Claims 1 and 8 were rejected under § 102(b) as being anticipated by U.S. Patent No. 3,198,294 issued to Stacy (hereinafter “Stacy ‘294”). Stacy ‘294 does not disclose or even remotely suggest a tuned mass damper disposed in a backplate hole as required by claims 1 and 8. In the Office Action, the Examiner stated that reference number 42 was a tuned mass damper (see Office Action, page 4, paragraph 4). Reference number 42 refers to a “a slotted head 42 [of a fastener] adapted to be rotated by a screwdriver” (column 4, lines 41-42). The Examiner provided no support or explanation of how a slotted fastener head could possibly be a tuned mass damper. As such, the Examiner has not supported his burden to establish a *prima facie* case. Moreover, Stacy ‘294 teaches away from the present invention. Specifically, Stacy ‘294 discloses that “a plurality of fasteners ... forces plate 21'' against [a rubberlike] pad 20” (column 4, lines 38-39 and 45). The fastener and rubberlike pad “allow each of the [brake lining] blocks to tilt slightly and accommodate the outer surfaces of the brake disk to thereby develop equal pressure over the faces of the blocks and prevent any localized heating” (column 3, lines 40-43). The purpose of the fasteners is “to prevent any loosening of the brake lining due to vibrations and to provide spring tension resiliency that allows vibration without parts banging against one another” (column 3, lines 46-50). Thus, the fasteners in Stacy ‘294 enable vibration of the brake lining and do not function as a tuned mass damper that dampens vibrations as required by the present invention. Therefore, a *prima facie* case has not been established and this rejection must be withdrawn. Since claims 2, 6, 9 and 13 depend on claims 1 and 8, Applicants believe these claims are allowable for the same reasons.

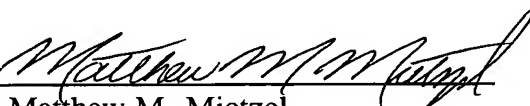
Rejection Under 35 U.S.C. § 103

Claims 6 and 13 were rejected under § 103(a) as being unpatentable over Heppes ‘024 or Stacy ‘294 in view of U.S. Patent No. 4,691,810 issued to Matsuzaki (hereinafter “Matsuzaki ‘810”). Since claims 6 and 13 depend on claims 1 and 8, respectively, the rejection of these claims is believed to be moot for the reasons previously discussed.

Conclusion

Applicants have made a genuine effort to respond to the Examiner's rejections in advancing the prosecution of this case. Applicants believe all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested.

Respectfully submitted,

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